

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
31 December 2003 (31.12.2003)

PCT

(10) International Publication Number  
WO 2004/001733 A1

(51) International Patent Classification<sup>7</sup>: G11B 7/24

(21) International Application Number:  
PCT/IB2003/002358

(22) International Filing Date: 4 June 2003 (04.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
02077424.6 19 June 2002 (19.06.2002) EP

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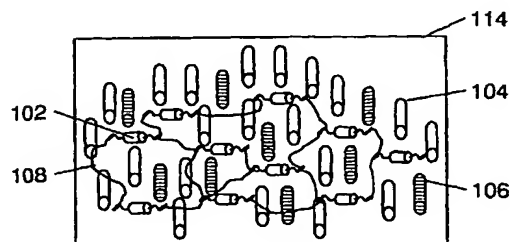
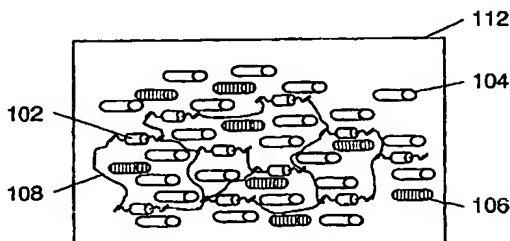
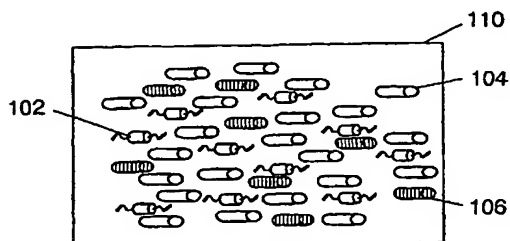
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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,

[Continued on next page]

(54) Title: MULTI-LAYER OPTICAL STORAGE USING PRE-ORIENTATION IN A GLASS MATRIX



(57) Abstract: The invention relates to producing an optical memory which combines stability of written and non-written data with high writing speed and good sensitivity during writing, such an optical memory as well as a method of writing in such a memory. The optical memory has a liquid crystal (LC) layer with a first type of LC molecules (102) aligned in one direction, forming a polymer network (108), and a second type of LC molecules (104) oriented in a perpendicular direction, in which the orientation of said second type of LC molecules is meta-stable. By making use of a force, exerted on the second type of LC molecules (104), by the network of aligned crosslinked molecules, an increase in relaxation rate for the second type of molecules (104) from a meta-stable state of orientation, is achieved, which makes it possible to use said relaxation for writing data at an increased writing rate.



ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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**Published:**

— *with international search report*

# INTERNATIONAL SEARCH REPORT

International Application No  
PC 1/1B 03/02358

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G11B7/24

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 331 233 A (PHILIPS) 6 September 1989 (1989-09-06) page 8, line 28 - line 56; claims 1,4-12	1
A	US 5 976 638 A (S J PICKEN) 2 November 1999 (1999-11-02) cited in the application claims 1,2	1
A	US 5 032 009 A (W M GIBBONS) 16 July 1991 (1991-07-16) claim 1; figures 1-4	1
A	US 5 353 247 A (S M FARIS) 4 October 1994 (1994-10-04) claims 1,43; figures 7,8	1

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

16 September 2003

Date of mailing of the international search report

29/09/2003

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB 03/02358

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